

HOWREY & SIMON

December 30, 1998

Attorneys at Law  
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(202) 783-0800  
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**Box Patent Application**

**BY HAND DELIVERY**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Re: Non-Provisional Utility Patent Application  
Application No.: To be Assigned; Filed: December 30, 1998  
For: **Liquid Crystal Display Having High Contrast Ratio**  
Inventor(s): **Chang-Hoon LEE, Jung-Uk SHIM and Kyeong-Hyeon KIM**  
Our Ref: 06192.0057

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. Utility Patent Application Transmittal Form;
2. Fee Transmittal Form 1082 (duplicate); and
3. U.S. Utility Patent Application entitled:  
**Liquid Crystal Display Having High Contrast Ratio**

and naming as inventors:

**Chang-Hoon LEE, Jung-Uk SHIM and Kyeong-Hyeon KIM**

the application consisting of:

- a. a specification containing:
  - (i) 7 pages of description prior to the claims;
  - (ii) 2 pages of claims (7 claims); and
  - (iii) a one (1) page abstract;
- b. 2 sheets of drawings: (Figs. 1 - 3, inclusive);
4. a copy of the executed Combined Declaration and Power of Attorney for Patent Application;

5. Form PTO-1595 Recordation Cover Sheet and a copy of the executed Assignment to Samsung Electronics Co., Ltd., recordation of which is hereby respectfully requested;
6. our check no. 303228 for \$800.00 to cover:  
  
\$760.00 filing fee for patent application;  
40.00 assignment recordation fee;
7. two (2) return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

Applicant hereby claims foreign priority benefits under Title 35, United States Code, § 119 to Korean Application No. 97-80199 filed on December 31, 1997.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 08-3038. A duplicate copy of this letter is enclosed.

Respectfully submitted,



Cono A. Carrano  
Registration No. 39,623

Enclosures

Please type a plus sign (+) inside this box

PTO/SB/05 (2/98)  
Approved for use through 09/30/00. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i>	Attorney Docket No.	06192.0057
	First Named Inventor or Application Identifier	Chang-Hoon LEE
	Title	Liquid Crystal Display Having High Contrast Ratio
	Express Mail Label No.	

<b>APPLICATION ELEMENTS</b> <i>See MPEP chapter 600 concerning utility patent application contents</i>	<b>ADDRESS TO:</b> Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
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1. ☒ \*Fee Transmittal Form (Form PTO-1082)  
*(Submit an original and a duplicate for fee processing)*
2. ☒ Specification [Total Pages 10]  
*(preferred arrangement set forth below)*
  - Descriptive title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R&D
  - Reference to Microfiche Appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claims
  - Abstract of the Disclosure
3. ☒ Drawing(s) (35 USC 113) [Total Sheets 2]
4. Oath or Declaration [Total Pages 3]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
*(for continuation/divisional with Box 17 completed)*  
[Note Box 5 below]
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference *(useable if Box 4b is checked)*  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ☐ Microfiche Computer Program *(Appendix)*
7. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
  - a. ☐ Computer Readable Copy
  - b. ☐ Paper Copy (identical to computer copy)
  - c. ☐ Statement verifying identity of above copies

#### ACCOMPANYING APPLICATION PARTS

8. ☒ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(b) Statement ☒ Power of Attorney  
*(when there is an assignee)*
10. ☐ English Translation Document *(if applicable)*
11. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503) (Two)  
*(should be specifically itemized)*
14. ☐ \*Small Entity Statement(s) ☐ Statement filed in prior application, Status still proper and desired
15. ☒ Certified Copy of Priority Document(s)  
*(if foreign priority is claimed)*
16. ☐ Other:

\*NOTE FOR ITEMS 1 & 14: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

#### 17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No: /

Prior Application Information: Examiner:


Group/Art Unit:

#### 18. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label

or ☒ Correspondence address below

*(Insert Customer No. or Attach bar code label here)*

NAME	HOWREY & SIMON				
	Box No. 34				
ADDRESS	1299 Pennsylvania Avenue, N.W.				
CITY	Washington	STATE	DC	ZIP CODE	20004-2402
COUNTRY	US	TELEPHONE	202-783-0800	FAX	202-383-7195
Name (Print/Type)	CONO A. GARRANO		Registration No. (Attorney/Agent)	39,623	
Signature			Date	December 30, 1998	

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

**HOWREY & SIMON**  
 Box No. 34  
 1299 Pennsylvania Avenue, N.W.  
 Washington, D.C. 20004-2402  
 (202) 783-0800

Attorney Docket No. 06192.0057

ASSISTANT COMMISSIONER FOR PATENTS  
 Washington, D.C. 20231

Sir:

Transmitted herewith for filing is the patent application of  
 Inventor(s): **Chang-Hoon LEE, Jung-Uk SHIM and Kyeong-Hyeon KIM**  
 For: **Liquid Crystal Display Having High Contrast Ratio**

Enclosed are:

- x 2 sheets of informal drawings. (Figs. 1 - 3, inclusive)
- x An assignment of the invention to SAMSUNG ELECTRONICS CO., LTD.
- x Form PTO-1595.
- x A certified copy of KOREAN APPLICATION NO. 97-80199
- An associate power of attorney.
- A verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27.
- x Executed Power of Attorney from Assignee.
- x Executed Declaration for Patent Application.

The filing fee has been calculated as shown below:

(Col. 1)		(Col. 2)		SMALL ENTITY		OR	OTHER THAN A SMALL ENTITY	
FOR	NO. FILED	NO. EXTRA		RATE	FEE		RATE	FEE
BASIC FEE					\$ 380.00	OR		\$ 760.00
TOTAL CLAIMS	7	-20 =	* 0	x 9 =		OR	x 18 =	
INDEP. CLAIMS	1	-3 =	* 0	x 39 =		OR	x 78 =	
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENTED				+ 130 =		OR	+ 260 =	
*If the difference in Col. 1 is less than zero, enter "0" in Col. 2				TOTAL		OR	TOTAL	\$ 760.00

— Please charge my Deposit Account No. 08-3038 in the amount of \_\_\_\_\_. A duplicate copy of this sheet is attached.

xx A check in the amount of \$ 800.00 to cover the filing and assignment recordation fees is enclosed.

xx The U.S. Patent and Trademark Office is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 08-3038. A duplicate copy of this sheet is attached.

xx Any additional filing fees required under 37 CFR 1.16.

xx Any patent application processing fees under 37 CFR 1.17.

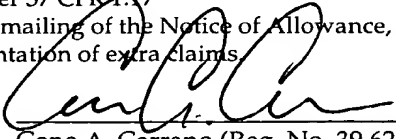
— The U.S. Patent and Trademark Office is hereby authorized to charge payment of the following fees during the pendency of this application or credit any overpayment to Deposit Account No. 08-3038. A duplicate copy of this sheet is enclosed.

— Any patent application processing fees under 37 CFR 1.17

— The issue fee set in 37 CFR 1.18 at or before mailing of the Notice of Allowance, pursuant to 37 CFR 1.311(b).

— Any filing fees under 37 CFR 1.16 for presentation of extra claims

Date December 30, 1998

  
 Cono A. Carrano (Reg. No. 39,623)